

REMARKS

The final Office action dated October 17, 2007, and the references cited therein have been carefully reviewed in light of the examiner's helpful comments and suggestions.

By these amendments, claims 29 and 46 have been amended to recite that a mask is mounted to cover a peripheral part of the beam of laser light, as disclosed on page 5, lines 10 and 11 of the specification.

The rejection of claims 32, 33, 48, and 49 under 35 U.S.C. 112, first paragraph, has been obviated by appropriate amendment. By the above amendments claim 29 has been amended to refer to a mask, and claims 32, 33, 48, and 49, which all depend on claim 29, further define the mask as a reflective mask.

Accordingly, favorable reconsideration and withdrawal of the rejection under 35 U.S.C. 112, first paragraph, is urged.

Claims 29, 31-33, 35, and 46-50 were rejected under 35 U.S.C. 103(a) as being obvious over Li et al. in view of Khoobehi et al.

These references have been carefully reviewed but are not believed to show or suggest Applicants' invention as now claimed in any manner. Reconsideration and allowance of the pending claims is therefore respectfully requested in view of the following remarks.

As a preliminary matter, it must be noted that the objectives of the Khoobehi et al. patent are very different from the problems that the Applicants have sought to resolve. In the present proposal, the objective is to avoid the problem (outlined on page 2 lines 16 to 19 and page 5 lines 1 to 26 of the present description) whereby areas of concrete which have had a low power density of the laser beam incident thereon are often resistant to removal at a subsequent scan by a higher power density part of the beam. The Applicants have tackled this problem by blocking out the peripheral part of the incident laser beam by a mask, the peripheral part being the usual lower density part of the beam.

In contrast, the Khoobehi et al. specification is concerned with the much more delicate operation of laser sculpting of a patient's cornea. The Khoobehi et al. reference is not concerned with blocking out a low power density part of the laser beam. Instead, it seeks precise control of the laser power distribution of the beam by use of a mask, which is essentially in the form of a diffraction grating (see column 2 lines 25 to 50).

Thus, in the present proposal, where a concrete surface is being treated, an encircling mask is mounted and the laser beam passes through the large central aperture to the concrete surface. This is not at all suggested or disclosed by the

teaching of Koobehi et al. where the mask consists of a transparent or translucent substrate (40) with a metal coating (41) deposited thereon, the metal coating then being etched to remove portions of the coating in a series of apertures in a pattern which results in a particular overall power density distribution reaching the patient's cornea for selected ablation. There is no complete central aperture for the high power density part of the laser beam to pass through. The translucent substrate (40) is always present even at the apertures, which are sufficiently small to lead to diffraction (see column 3, lines 5 to 58, and column 6, lines 18 to 68). In this respect, Applicants believe that the single aperture shown in figures 5 to 10 is merely to illustrate the laser pattern from a single aperture, which is stated to be either 0.6 microns or 10 microns in dimension, whereas in practice a pattern of plural such openings would be employed (see lines 52 to 56). In any event, it is submitted by Applicants that this teaching would not be considered to be applicable to a method of scabbling a concrete surface simply because the teachings of the Khoobehi et al. patent are in such a different technical field. Even if it is considered to be part of the general knowledge in laser technology, it does not provide the specific teaching of use of a mask to block out only a peripheral part of the beam.

Applicants also wish to point out that on page 11, lines 4 to 12, of the present specification, laser beam spot sizes on the concrete surface of 40mm and 70mm are mentioned by way of example. These are clearly several orders of magnitude greater than the size of the apertures in the metal coating of the mask used in the Khoobehi et al. reference. The fact that the laser beam passes through a wide central aperture is apparent from page 18, lines 20 to 22, of the specification.

Each issue raised in the Office action dated October 17, 2007, has been addressed, and it is believed that claims 29, 31-33, 35, and 46-50 are in condition for allowance. Wherefore, Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Applicant hereby petitions the Commissioner for Patents to extend the time for reply to the notice dated October 17, 2007, for one (1) month from January 17, 2008, to February 17, 2008. A duly completed credit card authorization form is attached to effect payment of the extension fee.

Respectfully submitted,

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